

Mathematics – Algebra 1 - Proficiency Level Descriptors (PLD)

Standard 9.0

Students **solve** a system of two linear equations in two variables algebraically and are able to **interpret** the answer graphically. Students are able to **solve** a system of two linear inequalities in two variables and to **sketch** the solution sets.

Concept	Below Basic	Basic	Proficient	Advanced Proficient
Graphically	<ul style="list-style-type: none"> Students are able to identify a solution to a system of two linear equations given a graph of the system 	<ul style="list-style-type: none"> Given a system of equation is slope-intercept form; students can graph both equations and identify the point of intersection as the solution. Students are unable to sketch the solution sets for a system of linear inequalities. Given the sketch of a solution set to a system of linear inequality, the students can correctly identify the area using a test point. 	<ul style="list-style-type: none"> Given a system of equations, they can graph both equations and interpret the solution to the system is the point of intersection. 	<p>In addition to Proficient students:</p> <ul style="list-style-type: none"> They can interpret the solution to the system of equations and inequalities in real-world situations.
Algebraically	<ul style="list-style-type: none"> Students are only able to execute one of the algebraic methods; given the method and a simple system. Given a point and a simple solution, students can determine whether the point is a solution to the system. 	<ul style="list-style-type: none"> Students are able to use at least one method to solve a system of two linear equations. Students are unable to represent the solution as an ordered pair or assess the reasonableness of their solutions. 	<ul style="list-style-type: none"> Students are able to use a variety of methods to solve systems of linear equations, and linear inequalities, and are able to assess the reasonableness of the solutions 	<p>In addition to Proficient students:</p> <ul style="list-style-type: none"> Students are able to solve real-world applications using systems of linear equations and inequalities, and are able to assess the reasonableness of the solutions